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ABSTRACT

This module, which is one in a series of 127 performance-based teacher education learning packages focusing upon specific professional competencies of vocational teachers, deals with planning instruction for students who have differing learning rates and capacities. Addressed in the individual learning experiences included in the module are the following topics: the characteristics of slower and more capable learners; procedures for planning instruction to meet students' individual needs; techniques for teaching slower learners (including providing drill and practice opportunities, teaching visually, relating real experiences to classroom instruction, using a physical approach, and developing a reward system); and methods for teaching more capable learners (keeping students challenged and maintaining high expectations, using discovery techniques, and involving students in activities that stimulate the development of creativity and communication skills); and developing a lesson plan for and actually providing instruction to vocational students with different learning speeds and abilities. Each learning experience includes some or all of the following: an overview, an enabling objective, instructional text, one or more learning activities, a feedback activity, and model answers to the feedback activity. (MN)

ED270587

Provide Instruction for Slower and More Capable Learners

Second Edition

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FOREWORD

This module is one of a series of 127 performance-based teacher education (PBTE) learning packages focusing upon specific professional competencies of vocational teachers. The competencies upon which these modules are based were identified and verified through research as being important to successful vocational teaching at both the secondary and postsecondary levels of instruction. The modules are suitable for the preparation of teachers and other occupational trainers in all occupational areas.

Each module provides learning experiences that integrate theory and application; each culminates with criterion-referenced assessment of the teacher's (instructor's, trainer's) performance of the specified competency. The materials are designed for use by teachers-in-training working individually or in groups under the direction and with the assistance of teacher educators or others acting as resource persons. Resource persons should be skilled in the teacher competencies being developed and should be thoroughly oriented to PBTE concepts and procedures before using these materials.

The design of the materials provides considerable flexibility for planning and conducting performance-based training programs for preservice and inservice teachers, as well as business-industry-labor trainers, to meet a wide variety of individual needs and interests. The materials are intended for use by universities and colleges, state departments of education, postsecondary institutions, local education agencies, and others responsible for the professional development of vocational teachers and other occupational trainers.

The PBTE curriculum packages in Categories A – J are products of a sustained research and development effort by the National Center's Program for Professional Development for Vocational Education. Many individuals, institutions, and agencies participated with the National Center and have made contributions to the systematic development, testing, revision, and refinement of these very significant training materials. Calvin J. Cotrell directed the vocational teacher competency research study upon which these modules are based and also directed the curriculum development effort from 1971 – 1972. Curtis R. Finch provided leadership for the program from 1972 – 1974. Over 40 teacher educators provided input in development of initial versions of the modules; over 2,000 teachers and 300 resource persons in 20 universities, colleges, and postsecondary institutions used the materials and provided feedback to the National Center for revisions and refinement.

Early versions of the materials were developed by the National Center in cooperation with the vocational teacher education faculties at Oregon State University and at the University of Missouri – Columbia. Preliminary testing of the materials was conducted at Oregon State University, Temple University, and the University of Missouri – Columbia.

Following preliminary testing, major revision of all materials was performed by National Center staff, with the assistance of numerous consultants and visiting scholars from throughout the country.

Advanced testing of the materials was carried out with assistance of the vocational teacher educators and students of Central Washington State College; Colorado State University; Ferris State College, Michigan; Florida State University; Holland College, P.E.I., Canada; Oklahoma State University; Rutgers University, New Jersey; State University College at Buffalo, New York; Temple University, Pennsylvania; University of Arizona; University of Michigan–Flint; University of Minnesota–Twin Cities; University of Nebraska–Lincoln; University of Northern Colorado; University of Pittsburgh, Pennsylvania; University of Tennessee; University of Vermont; and Utah State University.

The first published edition of the modules found widespread use nationwide and in many other countries of the world. User feedback from such extensive use, as well as the passage of time, called for the updating of the content, resources, and illustrations of the original materials. Furthermore, three new categories (K–M) have been added to the series, covering the areas of serving students with special/exceptional needs, improving students' basic and personal skills, and implementing competency-based education. This addition required the articulation of content among the original modules and those of the new categories.

Recognition is extended to the following individuals for their roles in the revision of the original materials: Lois G. Harrington, Catherine C. King-Fitch and Michael E. Wonacott, Program Associates, for revision of content and resources; Cheryl M. Lowry, Research Specialist, for illustration specifications; and Barbara Shea for art work. Special recognition is extended to the staff at AAVIM for their invaluable contributions to the quality of the final printed products, particularly to Sylvia Conine for typesetting; Marilyn MacMillan for module layout, design, and final art work; and to George W. Smith, Jr. for supervision of the module production process.

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MODULE

C-14

Provide Instruction for Slower and More Capable Learners

Second Edition

Module C-14 of Category C—Instructional Execution
PROFESSIONAL TEACHER EDUCATION MODULE SERIES

The National Center for Research in Vocational Education
The Ohio State University

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INTRODUCTION

Vocational-technical classes, like most classes, are generally made up of students with a variety of backgrounds, abilities, motivations, and interests. This variety makes teaching a fascinating activity, but it also creates some challenges for the teacher in planning and presenting instruction.

Students who learn slowly but persistently—to whom learning comes only with some difficulty—require and deserve learning experiences designed to fit their learning patterns and help them achieve their highest level of potential. Students who progress without much trouble—who learn rapidly and easily—also deserve the same considerations and opportunities.

Care must be used in dealing with students who have differing learning rates and capacities. Categorizing or pigeonholing students according to their learning rates can do injustice and damage to individual students. In general, *slower learners* are students who simply require more time to reach their educational goals. The *more capable learners* appear to learn quickly without undue effort.

However, some students who learn slowly in, for example, math or English may learn at an average or quite rapid rate in the vocational lab, where hands-on skills are important. Similarly, some students who are more capable in math or English may not be equally so in the vocational lab. In addition, all these students share a common characteristic—they are all deserving human beings worthy of your best efforts to help them reach their chosen occupational goals.

Your task in planning instruction for students with a range of learning abilities is to fit the teaching method to the needs of the students. You must be aware of your students' individual learning differences, willing to expend the effort to plan for their needs, and sensitive to their responses to various approaches.

While doing this, it is important for you to keep in mind that, very often, **student motivation** is more important than native ability, and **good teaching** is frequently more vital to a student's potential for success than that student's measured ability.

This module is designed to make you aware of the general learning characteristics of slower and more capable learners and to give you skill in planning your instruction so that their specific needs can be adequately met.

NOTE: This module is concerned primarily with the varying abilities of students within the so-called "normal range"—students who have typically been enrolled in regular vocational classes. The skills required to accommodate students with special/exceptional needs (e.g., the mentally retarded, learning disabled, gifted, and talented) are covered in the modules in Category L: Serving Students with Special/Exceptional Needs.

ABOUT THIS MODULE

Objectives

Terminal Objective: In an actual teaching situation, provide instruction for slower and more capable learners. Your performance will be assessed by your resource person, using the Teacher Performance Assessment Form, pp. 25–26 (*Learning Experience III*).

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the general characteristics of slower and more capable learners and of how to plan instruction to meet their individual needs (*Learning Experience I*).
2. Given descriptions of hypothetical slower and more capable learners, plan a lesson designed to meet the needs of those students (*Learning Experience II*).

Prerequisites

To complete this module, you must have competency in developing a lesson plan. If you do not already have this competency, meet with your resource person to determine what method you will use to gain this skill. One option is to complete the information and practice activities in the following module:

- *Develop a Lesson Plan,* Module B-4

Resources

A list of the outside resources that supplement those contained within the module follows. Check with your resource person (1) to determine the availability and the location of these resources, (2) to locate additional references in your occupational specialty, and (3) to get assistance in setting up activities with peers or observations of skilled teachers, if necessary. Your resource person may also be contacted if you have any difficulty with directions or in assessing your progress at any time.

Learning Experience I

No outside resources

Learning Experience II

Required

A resource person to evaluate your competency in preparing a lesson plan designed to meet the needs of slower and more capable learners.

Optional

A resource person to evaluate the overall adequacy of your lesson plan.

Learning Experience III

Required

An actual teaching situation in which you can provide instruction for slower and more capable learners.

A resource person to assess your competency in providing instruction for slower and more capable learners.

General Information

For information about the general organization of each performance-based teacher education (PBTE) module, general procedures for its use, and terminology that is common to all the modules, see About Using the National Center's PBTE Modules on the inside back cover. For more in-depth information on how to use the modules in teacher/trainer education programs, you may wish to refer to three related documents:

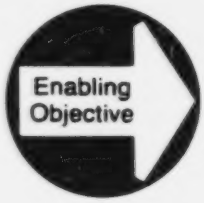
The *Student Guide to Using Performance-Based Teacher Education Materials* is designed to help orient preservice and inservice teachers and occupational trainers to PBTE in general and to the PBTE materials.

The *Resource Person Guide to Using Performance-Based Teacher Education Materials* can help prospective resource persons to guide and assist preservice and inservice teachers and occupational trainers in the development of professional teaching competencies through use of the PBTE modules. It also includes lists of all the module competencies, as well as a listing of the supplementary resources and the addresses where they can be obtained.

The *Guide to the Implementation of Performance-Based Teacher Education* is designed to help those who will administer the PBTE program. It contains answers to implementation questions, possible solutions to problems, and alternative courses of action.

Learning Experience I

OVERVIEW



After completing the required reading, demonstrate knowledge of the general characteristics of slower and more capable learners and of how to plan instruction to meet their individual needs.

You will be reading the information sheet, Planning Instruction for Slower and More Capable Learners, pp. 6–12.

You will be demonstrating knowledge of the characteristics of slower and more capable learners and of how to plan instruction to meet their individual needs by completing the Self-Check, pp. 13–14.

You will be evaluating your competency by comparing your completed Self-Check with the Model Answers, pp. 15–16.

Activity 1

For information about the general learning characteristics of slower and more capable learners and the teaching techniques that can help you meet their individual needs, read the following information sheet.

PLANNING INSTRUCTION FOR SLOWER AND MORE CAPABLE LEARNERS

The vocational-technical teacher who is presenting a lesson to a group of students is confronting individuals with a considerable range of learning capabilities and characteristics. There may be students in the class who learn well but need time to do so, a larger group who can be considered "average" in their learning abilities, and perhaps a few for whom learning is very easy and rapid.

In many cases, instructors tend to prepare lessons for that majority of students who fall in the "average learner" category. However, this neglects the needs of the slower and more capable learners who may constitute almost half the class.

In preparing for instruction, therefore, you as a vocational-technical teacher need to take into consideration the needs and learning characteristics of the slower and more capable learners as well as the "average" learners. You need to plan to use teaching techniques that will help all your students reach their highest learning potential.

It is always hazardous to classify students as being slower, average, or more capable. Students within each classification are diverse in nature, ability, background, and personality. Perhaps their only common characteristic is that they have progressed far enough in their schooling to be enrolled in your program.

Many slower learners need more time and practice to learn, but by persistent effort they ultimately can reach their educational goals. On the other hand, some students learn so rapidly and easily that they get bored, inattentive, and careless in their work. As a result, they reach a far lower level of achievement than they should or could.

Most people agree that teachers and schools should help all students, of whatever native abilities, to achieve as much as they are capable. In addition, they should evaluate students as individuals rather than according to rigid standards. There may be some unique problems in this for the vocational-technical teacher, however. The accepted standards of performance in the occupational specialty must be maintained, and in some fields, students must be able to pass state licensure examinations.

Yet there are positions calling for varying levels of proficiency in almost every occupational specialty. Therefore, workers at almost any skill level can be accommodated. If an individual can't achieve all the skills needed to be a tool and die maker, that person may be able to be a drill press operator. If an individual can't achieve the position of food service manager, he/she may be an excellent salad maker.

It is your responsibility to plan instruction so that all may learn occupational skills—insofar as possible.[1] It is not acceptable for anyone to contend, "I have set up extremely high standards for my vocational-technical program, and if certain students can't progress along with the rest of the class, they probably should change their occupational plans."

1. To gain skill in individualizing instruction, you may wish to refer to Module C-18, *Individualize Instruction*.

Characteristics of Slower and More Capable Learners

In order to plan lessons for students with a range of learning characteristics, you need to be aware of the learning behavior of students. As you observe students working in the classroom and laboratory, you can become sensitive to the particular needs and limitations of each individual. To help you recognize and respond to these needs and limitations, you need an understanding of the general characteristics of slower and more capable learners. Following are lists of these characteristics.

Slower Learners

These learners are generally characterized as follows:

- They tend to have low reading abilities (best single indicator; shows high correlation with intelligence).
- They tend not to be aggressive or highly competitive.
- They tend to learn physically (i.e., to understand a concept best if they can learn it through tactile means).
- They tend to be able to deal with the real and concrete far better than the abstract and theoretical.
- They tend to have difficulty in handling relationships, such as size, time, and space.
- They tend to be limited in self-direction, personal initiative, and ability to overcome obstacles (e.g., are dependent on others).
- They tend to prefer the company of peers or of people younger than themselves.
- They tend to accept people and information at face value.
- They tend to have relatively short attention spans, low levels of concentration, and little organization.
- They tend to be interested in the present and the immediate environment and often act on impulse.
- They tend to be generally uncommunicative.
- They tend to be comfortable with repetitive work, drill, routine, and manual work.
- They tend to be emotionally unstable, with a high rate of absenteeism.

More Capable Learners

These learners are generally characterized as follows:

- They tend to have good reading ability and to enjoy reading.
- They tend to be verbal and communicative (e.g., to possess an extensive vocabulary).
- They tend to be generally aggressive and competitive in the scholastic situation.
- They tend to be independent, initiating more activities on their own and more frequently attempting to overcome obstacles by themselves.
- They tend to be able to deal with abstract concepts and theoretical ideas.
- They tend to be able to generalize, to see relationships, and to visualize.
- They tend to have relatively long attention spans and ability to concentrate.
- They tend to respond positively to pressure, expectations, and stress.
- They tend to be interested in the future and the world at large rather than limiting their interests to immediate concerns.
- They tend to have the ability to delay gratification in pursuing long-term goals.
- They tend to get bored by repetition and routine and often seek new stimuli.
- They tend to be able to take broad steps in the learning process (e.g., to be impatient with detailed instructions and short tasks).

Being familiar with these statements of learner characteristics can help you identify types of learners. However, such statements must be applied with caution and good sense to individual cases. It is important to understand that these identified learner characteristics are very generalized.

If, for example, a student exhibits any one or two characteristics, it does not necessarily place that student in a particular category. Furthermore, if a student is in fact a slower (or more capable) learner, it does not mean that he or she possesses **all** the characteristics on the list. The student can, for instance, be a slower learner without being uncommunicative or emotionally unstable.

It should also be stressed that *slow* is not a synonym for *dull*. For some students, slowness is an important feature of their mental—and perhaps physical—style. This type of individual may have considerable creative potential. Most important, you should not equate the term *slow learner* with *bad* and *rapid learner* with *good*. The class is not composed of bad or good students, but of individuals with differing needs, learning rates, and innate characteristics.

Instructional Planning

Before planning instruction for the slower and more capable learners in the class, you must begin to **know the students**, their individual personalities, and their needs.[2] You are in a good position to get to know your students well because of the typically close relationships, longer class periods, and informal work environment of the vocational-technical lab.

In addition to gaining an understanding of students' learning capacities by observing their activities in the lab, you can also get valuable information about students from official school records. These records may include the overall scholastic record; reports from a psychologist or doctor; notes on special achievements or awards; and results of tests of intelligence, verbal aptitude, numerical aptitude, and mechanical comprehension.

You may also seek to better understand your students by asking them to fill in a personal information sheet or to write a short personal history covering a given list of items. It is essential, of course, that only information that is really relevant and valuable to the program be sought and that all information about the student be held in strict professional confidence.

Students may also be given special tests appropriate to the specific occupational field. There are standardized tests available for such aptitudes as the following:

- Visual relationships (e.g., for drafting students)
- Dexterity (e.g., for dental technicians)
- Mathematics (e.g., for electronic technicians)
- Color discrimination (e.g., for interior decorators)
- Coordination (e.g., for machinists)
- Human relations (e.g., for restaurant managers)

School guidance personnel can assist you in locating suitable tests and interpreting the results.

Planning instruction also involves the **selection of learning resources** based on the particular needs and abilities and interests of your students. Students need instructional materials that are written specifically for their reading level, age group, and general learning patterns. In addition to providing standard references and textbooks, you should also provide written materials designed for the varied reading levels of your students. If you know your group well, these materials can be pitched at just the right level for the students who will use them.

2.To gain skill in determining the needs and interests of students, you may wish to refer to Module B-1, *Determine Needs and Interests of Students.*

Some of your slower learners, for example, will probably need materials written at rather low reading levels. Commercially prepared materials that are suitable for the maturity level and interests of secondary and postsecondary students—yet written at lower reading levels—are becoming more common. If these are not available, however, you can produce your own instructional materials containing easy-to-follow procedures, clear illustrations, and explicit directions. You can challenge the more capable learner and good reader with books and articles originally intended for more advanced students or practicing technicians.[3]

Your plans will also need to include **opportunities for frequent success**. It is vital that all students in the class, whatever their learning capacities, have frequent opportunities to succeed. This is especially important, however, for students who are unused to success. This can be a crucial factor in motivating students toward further learning and in maintaining the self-esteem that leads to realistic confidence and continued effort.

In the lab, for example, you can arrange for beginning tasks at which every student can succeed—thus providing successful experiences on which each student can build. As a student is able to succeed, you can aim higher—constantly expecting more and encouraging higher levels of achievement.

Unfortunately, some vocational-technical programs are organized as though it would somehow be easier for students to change their own needs and abilities than for the teacher to modify the program's demands. As educators, we should seek to change these programs to adequately reflect the needs, interests, and abilities of all students.

To plan instruction for slower, "average," and more capable learners, you must develop flexibility and be willing to experiment. Each student learns in a somewhat different way from others. Thus, you may need to attempt a number of techniques and approaches before finding the ones that provide the right combination of challenge and success for each student. Because we still know so little about individual learning characteristics, it can be said generally that whatever works, is right.

3. To gain skill in selecting and preparing instructional materials, you may wish to refer to Module B-5, *Select Student Instructional Materials*, and Module B-6, *Prepare Teacher-Made Instructional Materials*.

Instructional Techniques

Given the general learning characteristics of the slower and more capable learner, it is possible to **suggest** teaching techniques that will **tend** to best suit these individuals. As you read the following lists of techniques, try to think of ways to apply them to your own particular occupational specialty and present or prospective teaching situation.

Techniques for the Slower Learner

Provide opportunities for plenty of practice and drill. Practice can strengthen the bonds of learning and lead to greater and longer retention. A number of projects and problems that contain similar skills or concepts can be assigned so students can thoroughly learn the new material without boredom.

Provide the time necessary to learn. If a slower learner needs more time to master a new subject or skill, arrange for the student to have the time—even if it involves changing a well-planned schedule somewhat. Some ways to provide more time are to offer open lab time after school, to conduct special small-group learning sessions, or to allow additional time for completing assignments.

Teach visually. Slower students can often profit more from seeing a skill demonstrated well than from a verbal discussion. A well-presented (or repeated) demonstration can help to clear up what might otherwise be confusing or meaningless. Furthermore, seeing that the operation can actually be done can give students the confidence needed to try to duplicate the teacher's performance.

In addition, you should use a great many types of visual aids—constantly supporting verbal instruction with good, clear visual images. Visual devices that the students can use whenever they need to refresh their memories (such as a wall chart of how to sharpen a tool) may be particularly helpful.

Use real experiences related to the classroom instruction. Field trips specially planned to show certain operations being performed will help slower learners who need concrete experiences. Several short field experiences with definite objectives are better than one or two long trips with many confusing impressions. If possible, help students get involved in on-the-job work experiences early, even if the tasks are low level.

During instruction, make the new relationships clear. Do not expect the students to figure out the relationships in the new subject matter. Relate the part to the whole—the specific operation you are teaching to the completed job. For example, show how the mitered hem corner is used in the finished garment.

Relate the abstract principle to the concrete object. For example, in aviation mechanics, the principles of hydraulics can be simultaneously related to the aircraft's actual control system.

Deliberately show how the new material is related to what the student already has learned. For example, in health services, learning how to take a blood pressure reading can be related to what the student already knows about taking a pulse.

Use a physical approach to learning. Use a hands-on approach. Provide models or real objects for the student to manipulate. Let the students try out the controls to see what happens. Let them handle the device so they can look at it from all sides. Let them make a "dry run" of the technique before actually attempting the operation.

Arrange for the first attempts at a new process to be free of serious consequences if a mistake is made. For example, barber schools have their students practice shaving soap-covered rubber balloons before shaving real live customers. The hands-on approach takes more time, but again, you should provide the time if it is needed.

Teach by small steps. Slower learners may need to know each step of the job from beginning to completion. They may need to be led carefully through the whole process before they can do it themselves. You cannot assume that they will be able to fill in instructional gaps by themselves or that they will naturally transfer past learning to the new experience. For example, in appliance repair, each small step in the troubleshooting process may have to be carefully delineated, organized, and demonstrated.

Use learning devices or games to aid retention. Associate facts and terminology with rhymes, tunes, acronyms, or other memory devices to help slower learners remember. Obviously, care must be taken to suit the learning device to the maturity of the students. Just as we learn as children to remember which months have 30 or 31 days by counting on our knuckles or by reciting "Thirty days hath September . . .,"so other devices can be identified or invented by the teacher to aid students.

For example, the printing teacher may help students learn the layout of lower-case letters in the type case by telling them to "**b**e **c**areful **d**riving **e**lephants **i**n **s**mall **F**ord **g**arages." The first letter of each word in this phrase indicates the correct sequence. Vocational-technical journals are full of descriptions of other devices that teachers have found to be helpful.

Teach basic know-how. This know-how is something that teachers sometimes take for granted. They assume that students know how to take tests, how to get a job, how to appear for an interview, how to fill out a form, and how to listen. The last item, how to listen, is particularly important for students who may have long learned to shut out confusion, noise, and teacher's talk in order to isolate themselves.

A practical example of teaching know-how is that of preparing students to take the state licensure examination in cosmetology. Not only do the students need to know the information and skills on which they will be tested, but they should be prepared for the examination situation itself.

Use a reward system for good work. Slower learners, who may be unaccustomed to success, tend to respond to reward in any form. At first, this may be a reward of value, such as small prizes or gifts. Later, as students progress in their learning, the reward for fine performance may be simply your praise, a special privilege, a smile, a pat on the back, or a class display of a student's work.[4]

4. To gain skill in using reinforcement techniques, you may wish to refer to Module C-13, *Employ Reinforcement Techniques.*

Provide an atmosphere of low tension and low stress. Less capable learners do not function well in stress situations; they tend to become anxious, to forget what they have learned, and to make mistakes. You should develop a learning situation in which the student's honest errors can be tolerated, the pressure to produce against time is minimal, and ridicule from other students is absent.

Use individualized learning materials whenever possible. With well-selected materials, a slower learner can progress at his/her own rate and use learning techniques compatible with his/her own learning style. Some slower learners have higher absentee rates, so materials that permit them to catch up when they do return to class can help prevent them from falling hopelessly behind the rest of the group.

Techniques for the More Capable Learner

More capable learners, too, deserve to have instruction planned for their unique abilities and needs. You cannot assume that the especially able learners will naturally be excellent students and will achieve to their highest potential. It may be that, because these students learn readily, they will become bored or frustrated in their progress and lose interest in their vocational-technical work.

The real and basic problem for you as the instructor is to keep the more capable learners challenged with meaningful opportunities to learn. The general characteristics of these learners suggest the following instructional strategies.

Keep the more capable learners challenged with new material. It is important that you have prepared new activities for the students and are ready to present them to the students as soon as they have finished the last task. The additional activities should not simply be further repetition of what has already been accomplished. They should be advanced work designed to extend the students' abilities. It is often effective to have more capable students suggest plans for themselves that go beyond normal classroom work.

Maintain high expectations. More capable learners respond well to reasonable scholastic pressure. If the teacher has high expectations concerning what students can do, they tend to accept those high expectations and to work hard to live up to them. You should accept only high-quality work from the students. You should not allow them to become satisfied with mediocre performance.

Evaluate students' work with care and thoughtfulness. Like other learners, those who are more capable need praise and reward for exceptional results. However, they also respond positively to expert criticism of their efforts and probing questions about their knowledge. They need to be made aware that there is always more to learn. You should ask students **why** they did what they did, as well as **how** they accomplished their jobs.

Use discovery techniques. In laboratory and class work, purposely omit some instruction, insert some difficulties into the job, or leave some problems unresolved for students to overcome by themselves. Provide an opportunity for the more capable learners to fill in the gaps by applying what they have already learned.

Use learning activities involving creativity and communication skills. A few examples follow:

- **Independent study**—A student can select a related area or phase of the lesson and do more in-depth work in that area. For example, one student can read an article on new developments in solid-state electronics. Another can experiment with a new hair-coloring technique.
- **Group work**—Several more capable learners may select an area of mutual interest to study as a group. A class report could conclude the work. For example, students in watch repair could carry out a survey of the current demand for watchmakers in the community.
- **Technical reports**—Individuals or teams can do library research or lab experiments and prepare reports of their work either in written or oral form.
- **Leadership opportunities**—A student may be able to tutor another student, direct a group of students in an activity, serve as a teacher's aide, or prepare a demonstration to present to the class.
- **Use of community resources**—A student can arrange to visit a person or place in the community to gain further knowledge or to become involved in a related community project. For example, an office practice student could work as a volunteer in the office of a local charitable organization.
- **Creative and inventive activities**—A truly advanced student might produce valuable creative work that could make a contribution to the field. Opportunity for this to happen should be provided. For example, an agriculture student might try to devise a new piece of farm equipment. A home economics student might work to develop a salable toy for infants.

An Example

The following example illustrates how a vocational-technical teacher might develop lesson plans that provide for the particular needs of various students in the class. Mr. Schwartz has planned a lesson, the objective of which is to introduce the rather abstract concept of hardening metal. Before planning the lesson, he knew that (1) five of his students had already mastered the concept, but two of them are uncomfortable leading groups, (2) four of his students have difficulty mastering new material when it is abstract, and (3) four of his students have difficulty with reading.

He decided to have small-group presentations, using the three students who had mastered metal hardening and who are comfortable leading groups as group leaders. He would also serve as a group leader.

He located some small models illustrating the molecular structure of steel that could be used, and he prepared some samples of normal hardened steel for the class to test. He included in the presentation the names of several companies in the community where the concept was being put into practice.

Following the presentation, he planned to have students exhibit their mastery of the concept in the laboratory, with the group leaders acting as supervisors and advisors. In addition to the written instructions for the experiment, he taped the instructions, step-by-step, on an audiotape.

Furthermore, he located a film loop on metal heat treatment that explained the abstract concept. Thus, students who did not retain the information given in the presentation could review the material. He also devised several other hands-on experiments illustrating the same concept, for use by students who failed to master the material during the first go-around.

Finally, he generated a list of special projects that called for work in related areas. The two students who had mastered the concept, but who have trouble in front of groups, could select a project from this list to work on as a group or independently while the rest of the class was pursuing the same material.

He knew that the list was not complete, but it would serve to start them thinking of a project to do. Further, the list could be used following the lab if more students were interested in pursuing the subject further.

Mr. Schwartz planned his lesson on the basis of his prior knowledge of his students. He attempted to include experiences that were challenging to all, yet allowed even the least capable of the students to succeed. He provided each individual with an opportunity to learn in his/her own way and to achieve as much as he/she could.

In order to make sure that his assumptions were correct and that each student's needs were being met by the lesson, Mr. Schwartz made frequent observations and evaluations of the students' work. From the slowest to the most capable, each student was able to feel that he/she was an important member of the class, and each completed the job in a manner of which he/she could be proud.

The following items check your comprehension of the material in the information sheet, Planning Instruction for Slower and More Capable Learners, pp. 6–12. Each of the six items requires a short essay-type response. Please explain fully, but briefly, and make sure you respond to all parts of each item.

SELF-CHECK

1. Explain why laboratory work is often an especially appropriate method for teaching slower learners.

2. How might you as a teacher be able to find out whether a student is a slower learner or is simply unmotivated in the class work?

3. Why might a vocational-technical teacher find it demanding to have a more capable learner in the class?

4. Does a student's basic learning ability fully determine the success the student will have in the occupational field? Explain.

5. How can a vocational-technical teacher help the student who is a poor reader to learn the skills and knowledge essential to success in the program?

6. Describe some ways in which slower learners in the class might benefit from the results of a special learning experience undertaken by a more capable class member.

Compare your written responses to the self-check items with the model answers given below. Your responses need not exactly duplicate the model responses; however, you should have covered the same **major** points.

MODEL ANSWERS

1. Laboratory work in vocational-technical education includes the kinds of learning activities that slower learners can, in general, handle best. The work is physical in that students can feel, see, and manipulate the objects with which they are working; and the results can be seen, measured, or tested. The problems tend to be real and concrete rather than abstract or verbal in nature.

   When slower learners are involved in a physical activity, they generally find it easier to comprehend the relationships of size, time, and so on. The slower learner tends to be more comfortable with the manual work and the repetitive operations that laboratory activity involves than with classroom learning that demands communication skills.

2. To properly diagnose the learning problems of students, the teacher must do more than casually observe individuals in the classroom. The students' cumulative records usually contain test data relative to reading ability, mathematical ability, general achievement, and perhaps intelligence. Carefully and correctly interpreted—perhaps with the help of a guidance counselor—this information can be compared with past and present classroom performance to gain some idea of whether the student is working up to capacity.

3. More capable learners may well make considerable demands on the teacher. They tend to ask probing questions and are not satisfied with superficial responses. However, their ultimate progress can be very gratifying to those who work with them.

   It may require a good deal of the teacher's effort to provide these students with challenging experiences. Some experiences may require special arrangements or unusual tools or materials, or they may involve areas of knowledge with which the teacher is not very familiar. Because some more capable learners may actually become more expert in an area than is the teacher, it requires a mature and secure teacher to accept this and to allow these students to achieve as much as they are able.

4. A student's basic learning capability is only one measure of how much he/she can be expected to achieve and how well he/she can be expected to perform. In most cases, it is motivation, interest, and capacity for work that affect the student's achievement more immediately. Most students, like people everywhere, achieve much less than they are actually capable of. If you have high, but realistic, expectations for your students; encourage them to keep striving; provide instruction to meet their needs and abilities; and reward their progress—then indeed there will usually be progress.

5. The student whose reading skills are weak may still be able to master the required occupational content and competencies if the teacher can use forms of instruction other than those relying heavily on reading. Teacher demonstrations, individual oral instruction, tutoring by other students, use of drawings and illustrations, and manual work are all examples of teaching that involves a minimum of reading.

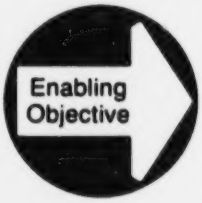
   At the same time, the teacher could encourage improved reading skills by providing appropriate written materials and can teach vocabulary through the use of technical terminology. In addition, special remedial reading instruction may be arranged. This is critical if the student's reading skills are not adequate for entry into his or her chosen occupation. Providing activities that do not involve reading should only be a stopgap measure, designed to allow the student to keep up in his/her vocational-technical subjects **until** his/her reading skills improve sufficiently to handle the regular materials.

6. Special assignments and activities undertaken by more capable learners can benefit the slower learners in the class if the results of the work are shared with the whole group. The more capable learners can give oral reports on special reading they have done, prepare and present demonstrations, develop teaching aids for use in the class, or act as teacher's aides during laboratory work. Because of their relationship with peers, the more capable learners may in some instances be better able to communicate with slower learners than can the teacher.

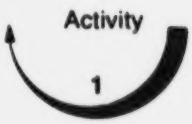
Level of Performance: Your written responses to the self-check items should have covered the same **major** points as the model answers. If you missed some points or have questions about any additional points you made, review the material in the information sheet, Planning Instruction for Slower and More Capable Learners, pp. 6–12, or check with your resource person if necessary.

Learning Experience II

OVERVIEW



Given descriptions of hypothetical slower and more capable learners, plan a lesson designed to meet the needs of those students.



You will be reading about the characteristics of your hypothetical students, p. 18.

You will be diagnosing the instructional needs of the students described.

You will be selecting a student performance objective in your occupational specialty and selecting, modifying, or developing a lesson plan designed to meet that objective, giving particular attention to the specific needs of the students described.

Your competency in preparing a lesson plan designed to meet the needs of the students described will be evaluated by your resource person, using the Planning Checklist, pp. 21–22.

You may also wish to have your resource person review the overall adequacy of your plan.

Read the following descriptions of the hypothetical students in your class. Out of the five students described, identify four who might well be found in classes in your occupational specialty and teaching level. As you read, begin thinking about each one's specific instructional needs.

CHARACTERISTICS OF YOUR STUDENTS

Brent Pryor: Brent is a rapid reader and reads everything he can get his hands on. Often he comes to class early to talk to you about his latest enthusiasm or some new information he has picked up. During class discussions, he tends to argue with his fellow students and question you about apparent inconsistencies.

His laboratory work is excellent, though he frequently wants to change the design or specifications of the job so it will be more interesting to him. He doesn't work very well as a member of a group but is usually found in the class or laboratory working by himself. You sometimes have to force him to stop when the period is over.

Paul Wymer: If Paul reads at all, it is a comic book or sometimes a sports magazine. He likes to show what he is reading to his buddies and to talk about it with them. It is hard to get him to complete any assignment because he gets tired of it quickly and either wanders around or starts to talk to a friend. He does as little as he can because being in school really doesn't make too much sense to him.

He doesn't talk to you much except to ask what he has to do next in the job. While he is not really a behavior problem, he is tiring to you because he is always engaging in some form of horseplay with his friends, fiddling with a piece of equipment, or banging on something to make a little noise. When he is required to plan a project on his own, he hasn't an idea in the world about what he wants to do.

Lisa Engle: Lisa seems to be involved in everything that is going on around school. She is president of one organization and an officer of several others. At the same time, she is active in the community. In her efforts to direct the work of others, her own work sometimes suffers from neglect. She misses class occasionally because of other demands on her time.

She learns rapidly and can get a lot of work done in a short time. However, she is impatient with details, often skipping to the final problem without doing the steps leading up to it. This sometimes gets her in trouble. She reads rapidly and with comprehension, but her writing is deplorable because she becomes bored with the routine of writing. She prepares for tests, is concerned about her grades, and frequently asks you how her work compares with that of others.

Roy Stivers: Roy loves machines and tools and anything mechanical. He tinkers, adjusts, and operates every piece of equipment used in the program and knows a great deal about each machine. When something needs to be repaired, he volunteers to work on it. This sometimes takes too much time away from his required class work, but he would rather do a complex repair job than read a page of text.

Normally quiet and even-tempered, he gets angry at other students when they misuse laboratory equipment. Class lectures don't do him much good, he never participates in discussions, and he doesn't comprehend the textbook materials. If he can be shown an operation in the laboratory, however, he can usually master it quite quickly.

Amy McGinnis: Amy is a bit older than the rest of the students because she dropped out of school for a while and has now returned. She works part-time, has family responsibilities, and sees her school work as a way of helping her to get out of a dead-end job. Sometimes tired when she comes to class, she nevertheless persists doggedly and generally keeps up with the others.

She has to read her textbook assignments several times in order to learn the material, but once learned she seems to remember it fairly well. Her written work shows a limited vocabulary and ability to express ideas, and she makes some mistakes in spelling and sentence structure. The other members of the class respect her because of her experience, but she would rather associate with you.

Diagnose the instructional needs of four of the students described in the previous activity, and write a brief description of those needs based upon each student's learning characteristics.

Select a student performance objective in your occupational specialty, and prepare **one** detailed lesson plan for achieving the objective you have selected. In your plan, include an explanation of the materials and techniques you will use to meet the needs of the four slower and more capable learners whose needs you diagnosed. Your plan should also be designed to meet the needs of the "average" learners in your class. Instead of developing a lesson plan, you may select a lesson plan that you have previously developed and adapt that plan, giving special attention to meeting the needs of the slower and more capable learners with whom you are working.

After you have developed your lesson plan, arrange to have your resource person review your diagnoses and evaluate the adequacy of your plan in meeting the specific needs of the slower and more capable learners you identified. Give him/her the Planning Checklist, pp. 21–22, to use in evaluating your work.

You may wish to have your resource person review the overall adequacy of your plan. He/she could use the Teacher Performance Assessment Form in Module B-4, *Develop a Lesson Plan,* as a guide.

PLANNING CHECKLIST

Directions: Place an X in the NO, PARTIAL, or FULL box to indicate that each of the following performance components was not accomplished, partially accomplished, or fully accomplished. If, because of special circumstances, a performance component was not applicable, or impossible to execute, place an X in the N/A box.

Name _____

Date _____

Resource Person _____

	LEVEL OF PERFORMANCE			
Materials and techniques were provided in the plan to take advantage of or compensate for the following characteristics of each student:	N/A	No	Partial	Full
1. Brent's:				
a. love of reading	☐	☐	☐	☐
b. desire to work independently	☐	☐	☐	☐
c. need to create, invent, and discover	☐	☐	☐	☐
d. need for challenge	☐	☐	☐	☐
2. Paul's:				
a. short attention span and inability to concentrate	☐	☐	☐	☐
b. dislike of reading and, perhaps, low reading level	☐	☐	☐	☐
c. need for concrete, hands-on activity and real experiences	☐	☐	☐	☐
d. need for step-by-step instruction	☐	☐	☐	☐
3. Lisa's:				
a. natural leadership skills	☐	☐	☐	☐
b. rapid learning pace and reading pace	☐	☐	☐	☐
c. need to compete	☐	☐	☐	☐
d. need to pay more attention to detail and to produce higher-quality work	☐	☐	☐	☐
4. Roy's:				
a. dislike of reading and, perhaps, low reading level	☐	☐	☐	☐
b. need for concrete, hands-on activity and real experiences	☐	☐	☐	☐
c. ability to understand and perform complex manipulative tasks	☐	☐	☐	☐
d. initiative	☐	☐	☐	☐

	N/A	No	Partial	Full
5. Amy's:				
a. slow reading comprehension	☐	☐	☐	☐
b. persistence	☐	☐	☐	☐
c. limited vocabulary and ability to express ideas in writing	☐	☐	☐	☐
d. age and experience	☐	☐	☐	☐
The materials and techniques selected:				
6. would aid the students in meeting the lesson objectives	☐	☐	☐	☐

Level of Performance: All items must receive FULL or N/A responses. If any item receives a NO or PARTIAL response, revise your plan accordingly, or check with your resource person if necessary.

Learning Experience III

FINAL EXPERIENCE

In an **actual teaching situation,*** provide instruction for slower and more capable learners.

Provide instruction for the slower and more capable learners in a class you are responsible for teaching. This will include—

- identifying the students who may be slower or more capable learners
- diagnosing the individual instructional needs of those students, as well as those of the "average" learners
- selecting a student performance objective in your occupational specialty
- selecting, modifying, or developing a lesson plan for accomplishing this objective
- including in your plan materials and techniques designed to meet the specific needs of the slower and more capable learners
- presenting your lesson to the class

NOTE: Due to the nature of this experience, you will need to have access to an actual teaching situation over an extended period of time (e.g., two to six weeks).

As you complete each of the above activities, document your actions (in writing, on tape, through a log) for assessment purposes.

Your resource person may want you to submit your written lesson plan to him/her for evaluation before you present your lesson. It may be helpful for your resource person to use the TPAF from Module B-4, *Develop a Lesson Plan,* to guide his/her evaluation.

Arrange in advance to have your resource person review your documentation and observe your lesson presentation.

Your total competency will be assessed by your resource person, using the Teacher Performance Assessment Form, pp. 25–26.

Based upon the criteria specified in this assessment instrument, your resource person will determine whether you are competent in providing instruction for slower and more capable learners.

* For a definition of actual teaching situation, see the inside back cover.

NOTES

TEACHER PERFORMANCE ASSESSMENT FORM

Provide Instruction for Slower and More Capable Learners (C-14)

Name _____

Date _____

Resource Person _____

Directions: Indicate the level of the teacher's accomplishment by placing an X in the appropriate box under the LEVEL OF PERFORMANCE heading. If, because of special circumstances, a performance component was not applicable, or impossible to execute, place an X in the N/A box.

	LEVEL OF PERFORMANCE					
	N/A	None	Poor	Fair	Good	Excellent
1. Learners' characteristics were identified through such means as the following:						
a. contact with them in the class and lab	☐	☐	☐	☐	☐	☐
b. observation of their learning activities	☐	☐	☐	☐	☐	☐
c. school records	☐	☐	☐	☐	☐	☐
d. personal information sheets or personal histories written by the students	☐	☐	☐	☐	☐	☐
e. special tests appropriate to the specific occupational field	☐	☐	☐	☐	☐	☐
2. Through diagnosis, the teacher identified whether any students might be slower or more capable learners	☐	☐	☐	☐	☐	☐
3. The teacher ensured that the diagnosis was used to improve instruction, **not** to categorize or pigeonhole students	☐	☐	☐	☐	☐	☐
4. The teacher included in the lesson one or more of the following techniques effective with slower learners, as appropriate based on the diagnosis:						
a. provision of opportunities for plenty of drill and practice	☐	☐	☐	☐	☐	☐
b. provision of the time necessary to learn	☐	☐	☐	☐	☐	☐
c. use of real experiences, demonstrations, concrete examples, clear visuals, and hands-on activities	☐	☐	☐	☐	☐	☐
d. step-by-step instruction, using small steps and making relationships clear	☐	☐	☐	☐	☐	☐
e. use of learning devices or games to aid retention	☐	☐	☐	☐	☐	☐
f. teaching of basic know-how	☐	☐	☐	☐	☐	☐
g. rewards for good work	☐	☐	☐	☐	☐	☐
h. creation of an atmosphere of low tension and stress	☐	☐	☐	☐	☐	☐
i. use of individualized learning materials	☐	☐	☐	☐	☐	☐

	N/A	None	Poor	Fair	Good	Excellent
5. The teacher included in the lesson one or more of the following techniques effective with more capable learners, as appropriate based on the diagnosis:						
a. provision of challenging new materials and assignments	☐	☐	☐	☐	☐	☐
b. insistence on high-quality work; high expectations . .	☐	☐	☐	☐	☐	☐
c. careful evaluation, including constructive criticism . .	☐	☐	☐	☐	☐	☐
d. use of discovery techniques	☐	☐	☐	☐	☐	☐
e. opportunities for independent study, group work, preparation of reports, and use of community resources	☐	☐	☐	☐	☐	☐
f. opportunities for leadership	☐	☐	☐	☐	☐	☐
g. provision of activities allowing for creativity and inventiveness	☐	☐	☐	☐	☐	☐
6. The materials and techniques selected would aid the students in meeting the lesson objectives	☐	☐	☐	☐	☐	☐

Level of Performance: All items must receive N/A, GOOD, or EXCELLENT responses. If any item receives a NONE, POOR, or FAIR response, the teacher and resource person should meet to determine what additional activities the teacher needs to complete in order to reach competency in the weak area(s).

NOTES

NOTES

UPD 6055/5-86

ABOUT USING THE NATIONAL CENTER'S PBTE MODULES

Organization

Each module is designed to help you gain competency in a particular skill area considered important to teaching success. A module is made up of a series of learning experiences, some providing background information, some providing practice experiences, and others combining these two functions. Completing these experiences should **enable** you to achieve the **terminal** objective in the final learning experience. The final experience in each module always requires you to demonstrate the skill in an actual teaching situation when you are an intern, a student teacher, an inservice teacher, or occupational trainer.

Procedures

Modules are designed to allow you to individualize your teacher education program. You need to take only those modules covering skills that you do not already possess. Similarly, you need not complete any learning experience within a module if you already have the skill needed to complete it. Therefore, before taking any module, you should carefully review (1) the introduction, (2) the objectives listed on p. 4, (3) the overviews preceding each learning experience, and (4) the final experience. After comparing your present needs and competencies with the information you have read in these sections, you should be ready to make one of the following decisions:

- That you do not have the competencies indicated and should complete the entire module
- That you are competent in one or more of the enabling objectives leading to the final learning experience and, thus, can omit those learning experiences
- That you are already competent in this area and are ready to complete the final learning experience in order to "test out"
- That the module is inappropriate to your needs at this time

When you are ready to complete the final learning experience **and** have access to an actual teaching situation, make the necessary arrangements with your resource person. If you do not complete the final experience successfully, meet with your resource person and arrange to (1) repeat the experience or (2) complete (or review) previous sections of the module or other related activities suggested by your resource person before attempting to repeat the final experience.

Options for recycling are also available in each of the learning experiences preceding the final experience. Any time you do not meet the minimum level of performance required to meet an objective, you and your resource person may meet to select activities to help you reach competency. This could involve (1) completing parts of the module previously skipped, (2) repeating activities, (3) reading supplementary resources or completing additional activities suggested by the resource person, (4) designing your own learning experience, or (5) completing some other activity suggested by you or your resource person.

Terminology

Actual Teaching Situation: A situation in which you are actually working with and responsible for teaching secondary or postsecondary vocational students or other occupational trainees. An intern, a student teacher, an inservice teacher, or other occupational trainer would be functioning in an actual teaching situation. If you do **not** have access to an actual teaching situation when you are taking the module, you can complete the module **up to** the final learning experience. You would then complete the final learning experience later (i.e., when you have access to an actual teaching situation).

Alternate Activity or Feedback: An item that may **substitute** for required items that, due to special circumstances, you are unable to complete.

Occupational Specialty: A specific area of preparation within a vocational service area (e.g., the service area Trade and Industrial Education includes occupational specialties such as automobile mechanics, welding, and electricity.

Optional Activity or Feedback: An item that is not required but that is designed to **supplement** and enrich the required items in a learning experience.

Resource Person: The person in charge of your educational program (e.g., the professor, instructor, administrator, instructional supervisor, cooperating/supervising/classroom teacher, or training supervisor who is guiding you in completing this module).

Student: The person who is receiving occupational instruction in a secondary, postsecondary, or other training program.

Vocational Service Area: A major vocational field: agricultural education, business and office education, marketing and distributive education, health occupations education, home economics education, industrial arts education, technical education, or trade and industrial education.

You or the Teacher/Instructor: The person who is completing the module.

Levels of Performance for Final Assessment

N/A: The criterion was not met because it was **not applicable** to the situation.

None: No attempt was made to meet the criterion, although it was relevant.

Poor: The teacher is unable to perform this skill or has only **very limited ability** to perform it.

Fair: The teacher is unable to perform this skill in an acceptable manner but has **some ability** to perform it.

Good: The teacher is able to perform this skill in an **effective** manner.

Excellent: The teacher is able to perform this skill in a **very effective** manner.

Titles of the National Center's Performance-Based Teacher Education Modules

Category A: Program Planning, Development, and Evaluation

- A–1 Prepare for a Community Survey
- A–2 Conduct a Community Survey
- A–3 Report the Findings of a Community Survey
- A–4 Organize an Occupational Advisory Committee
- A–5 Maintain an Occupational Advisory Committee
- A–6 Develop Program Goals and Objectives
- A–7 Conduct an Occupational Analysis
- A–8 Develop a Course of Study
- A–9 Develop Long-Range Program Plans
- A–10 Conduct a Student Follow-Up Study
- A–11 Evaluate Your Vocational Program

Category B: Instructional Planning

- B–1 Determine Needs and Interests of Students
- B–2 Develop Student Performance Objectives
- B–3 Develop a Unit of Instruction
- B–4 Develop a Lesson Plan
- B–5 Select Student Instructional Materials
- B–6 Prepare Teacher-Made Instructional Materials

Category C: Instructional Execution

- C–1 Direct Field Trips
- C–2 Conduct Group Discussions, Panel Discussions, and Symposiums
- C–3 Employ Brainstorming, Buzz Group, and Question Box Techniques
- C–4 Direct Students in Instructing Other Students
- C–5 Employ Simulation Techniques
- C–6 Guide Student Study
- C–7 Direct Student Laboratory Experience
- C–8 Direct Students in Applying Problem-Solving Techniques
- C–9 Employ the Project Method
- C–10 Introduce a Lesson
- C–11 Summarize a Lesson
- C–12 Employ Oral Questioning Techniques
- C–13 Employ Reinforcement Techniques
- C–14 Provide Instruction for Slower and More Capable Learners
- C–15 Present an Illustrated Talk
- C–16 Demonstrate a Manipulative Skill
- C–17 Demonstrate a Concept or Principle
- C–18 Individualize Instruction
- C–19 Employ the Team Teaching Approach
- C–20 Use Subject Matter Experts to Present Information
- C–21 Prepare Bulletin Boards and Exhibits
- C–22 Present Information with Models, Real Objects, and Flannel Boards
- C–23 Present Information with Overhead and Opaque Materials
- C–24 Present Information with Filmstrips and Slides
- C–25 Present Information with Films
- C–26 Present Information with Audio Recordings
- C–27 Present Information with Televised and Videotaped Materials
- C–28 Employ Programmed Instruction
- C–29 Present Information with the Chalkboard and Flip Chart
- C–30 Provide for Students' Learning Styles

Category D: Instructional Evaluation

- D–1 Establish Student Performance Criteria
- D–2 Assess Student Performance: Knowledge
- D–3 Assess Student Performance: Attitudes
- D–4 Assess Student Performance: Skills
- D–5 Determine Student Grades
- D–6 Evaluate Your Instructional Effectiveness

Category E: Instructional Management

- E–1 Project Instructional Resource Needs
- E–2 Manage Your Budgeting and Reporting Responsibilities
- E–3 Arrange for Improvement of Your Vocational Facilities
- E–4 Maintain a Filing System
- E–5 Provide for Student Safety
- E–6 Provide for the First Aid Needs of Students
- E–7 Assist Students in Developing Self-Discipline
- E–8 Organize the Vocational Laboratory
- E–9 Manage the Vocational Laboratory
- E–10 Combat Problems of Student Chemical Use

Category F: Guidance

- F–1 Gather Student Data Using Formal Data-Collection Techniques
- F–2 Gather Student Data Through Personal Contacts
- F–3 Use Conferences to Help Meet Student Needs
- F–4 Provide Information on Educational and Career Opportunities
- F–5 Assist Students in Applying for Employment or Further Education

Category G: School–Community Relations

- G–1 Develop a School–Community Relations Plan for Your Vocational Program
- G–2 Give Presentations to Promote Your Vocational Program
- G–3 Develop Brochures to Promote Your Vocational Program
- G–4 Prepare Displays to Promote Your Vocational Program
- G–5 Prepare News Releases and Articles Concerning Your Vocational Program
- G–6 Arrange for Television and Radio Presentations Concerning Your Vocational Program
- G–7 Conduct an Open House
- G–8 Work with Members of the Community
- G–9 Work with State and Local Educators
- G–10 Obtain Feedback about Your Vocational Program

Category H: Vocational Student Organization

- H–1 Develop a Personal Philosophy Concerning Vocational Student Organizations
- H–2 Establish a Vocational Student Organization
- H–3 Prepare Vocational Student Organization Members for Leadership Roles
- H–4 Assist Vocational Student Organization Members in Developing and Financing a Yearly Program of Activities
- H–5 Supervise Activities of the Vocational Student Organization
- H–6 Guide Participation in Vocational Student Organization Contests

Category I: Professional Role and Development

- I–1 Keep Up to Date Professionally
- I–2 Serve Your Teaching Profession
- I–3 Develop an Active Personal Philosophy of Education
- I–4 Serve the School and Community
- I–5 Obtain a Suitable Teaching Position
- I–6 Provide Laboratory Experiences for Prospective Teachers
- I–7 Plan the Student Teaching Experience
- I–8 Supervise Student Teachers

Category J: Coordination of Cooperative Education

- J–1 Establish Guidelines for Your Cooperative Vocational Program
- J–2 Manage the Attendance, Transfers, and Terminations of Co-Op Students
- J–3 Enroll Students in Your Co-Op Program
- J–4 Secure Training Stations for Your Co-Op Program
- J–5 Place Co-Op Students on the Job
- J–6 Develop the Training Ability of On-the-Job Instructors
- J–7 Coordinate On-the-Job Instruction
- J–8 Evaluate Co-Op Students' On-the-Job Performance
- J–9 Prepare for Students' Related Instruction
- J–10 Supervise an Employer–Employee Appreciation Event

Category K: Implementing Competency-Based Education (CBE)

- K–1 Prepare Yourself for CBE
- K–2 Organize the Content for a CBE Program
- K–3 Organize Your Class and Lab to Install CBE
- K–4 Provide Instructional Materials for CBE
- K–5 Manage the Daily Routines of Your CBE Program
- K–6 Guide Your Students Through the CBE Program

Category L: Serving Students with Special/Exceptional Needs

- L–1 Prepare Yourself to Serve Exceptional Students
- L–2 Identify and Diagnose Exceptional Students
- L–3 Plan Instruction for Exceptional Students
- L–4 Provide Appropriate Instructional Materials for Exceptional Students
- L–5 Modify the Learning Environment for Exceptional Students
- L–6 Promote Peer Acceptance of Exceptional Students
- L–7 Use Instructional Techniques to Meet the Needs of Exceptional Students
- L–8 Improve Your Communication Skills
- L–9 Assess the Progress of Exceptional Students
- L–10 Counsel Exceptional Students with Personal–Social Problems
- L–11 Assist Exceptional Students in Developing Career Planning Skills
- L–12 Prepare Exceptional Students for Employability
- L–13 Promote Your Vocational Program with Exceptional Students

Category M: Assisting Students in Improving Their Basic Skills

- M–1 Assist Students in Achieving Basic Reading Skills
- M–2 Assist Students in Developing Technical Reading Skills
- M–3 Assist Students in Improving Their Writing Skills
- M–4 Assist Students in Improving Their Oral Communication Skills
- M–5 Assist Students in Improving Their Math Skills
- M–6 Assist Students in Improving Their Survival Skills

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